

Causes of Diabetic Heart Disease: Its Symptoms and Diagnosis

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DESCRIPTION

Diabetes and heart disease are two of the most common health problems among the world. Both conditions are closely related with people who have diabetes, being at higher risk of developing heart disease. Diabetic heart disease is a condition where diabetes damages the heart and blood vessels, leading to heart attacks or stroke. Diabetic heart disease is a serious and potentially life-threatening complication of diabetes mellitus, a chronic metabolic disorder characterized by elevated levels of glucose (sugar) in the blood. Diabetes can damage the blood vessels and nerves that supply the heart, leading to a variety of cardiovascular problems such as coronary artery disease, heart failure, and peripheral vascular disease.

Coronary Artery Disease (CAD) is the most common type of diabetic heart disease, affecting approximately two-thirds of people with diabetes. CAD occurs when the arteries that supply blood to the heart become narrowed or blocked by fatty deposits called plaques, reducing blood flow and oxygen supply to the heart muscle. Over time, CAD can cause chest pain (angina), heart attack, or sudden cardiac death.

Heart failure, another complication of diabetic heart disease, happens when the heart cannot pump enough blood to meet the body's needs, leading to fatigue, shortness of breath, and fluid build-up in the lungs and legs. Diabetes increases the risk of heart failure by damaging the heart muscle, impairing its ability to contract and relax properly, and promoting inflammation and oxidative stress.

Peripheral Vascular Disease (PVD) is a condition in which the blood vessels outside the heart, such as those in the legs and feet becomes narrowed or blocked, leading to poor circulation, pain, numbness, and non-healing wounds. Diabetes is a major risk factor for PVD, as it damages the blood vessels and nerves that control the blood flow to the limbs.

Causes

People with diabetes have high blood sugar levels that can damage blood vessels and nerves in the body over time. This

damage can lead to atherosclerosis, a condition where plaque builds up in the arteries, making it difficult for the blood to flow freely. Atherosclerosis can cause heart attacks, strokes, and other cardiovascular diseases. Additionally, people with diabetes are more likely to have other risk factors for heart disease, such as high blood pressure, high cholesterol levels, and obesity. These risk factors can further increase the risk of developing diabetic heart disease.

Symptoms

The symptoms of diabetic heart disease can vary depending on the severity of the condition. Some common symptoms of diabetic heart disease are chest pain or discomfort, shortness of breath, nausea or vomiting, sweating, fatigue, weakness. If the person has diabetes and experiences any of these symptoms, it's essential to seek medical attention immediately.

Diagnosis

If the person is suffering with diabetes, the doctor will check the blood pressure, cholesterol levels, and other risk factors for heart disease regularly. They may also perform an Electrocardiogram (ECG) to evaluate the heart's electrical activity and to learn any heart problems. If the doctor suspects that the person is having a diabetic heart disease, they may perform additional tests, such as a stress test, echocardiogram, or cardiac catheterization, to evaluate the function of the heart and blood vessels.

CONCLUSION

Diabetic heart disease is a complex and multifactorial condition that arises from the connection between genetic, environmental, and lifestyle changes. The treatment of diabetic heart disease aims to reduce the risk of heart attacks, stroke, and other cardiovascular diseases. Treatment of the diabetic heart disease includes some of the lifestyle changes, by maintaining a healthy weight, and exercising regularly.

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